



RUST PENETRATING EPOXY SEALER MGS-96-05B

1.0 DESCRIPTION. This specification covers a two-component epoxy amido-amine primer/sealer that is mixed prior to use.

1.1 The coating shall be a two-package system with a mixing ratio of 1:1 and shall not require the use of a thinner.

1.2 The sealer is available in two grades, a winter grade suitable for application at ambient temperatures between 50 F (10 C) and 90 F (32 C), and a summer grade suitable for application at ambient temperatures between 70 F (21 C) and 110 F (43 C).

1.3 The coating shall be lead free and shall meet current VOC (Volatile Organic Content) restrictions.

1.4 The coating shall be suitable for application at 1-2 mils (25 to 50 μ m) dry film thickness over marginally prepared steel and most generic types of aged coatings.

2.0 REFERENCE STANDARDS

2.1 AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM).

2.1.1 Test Methods for Properties:

D1475 – Density of Paint, Varnish, Lacquer and Related Products

D3960 – Volatile Organic Content (VOC) of Paints

B117 -- Salt Fog Test

3.0 INSPECTION.

3.1 All material supplied under this specification shall be subject to timely inspection by the purchaser or his authorized representative. The purchaser shall have the right to reject any materials supplied which are found to be defective under this specification.

3.2 Samples of any or all ingredients used in the manufacture of this paint may be requested by the purchaser and shall be supplied upon request, along with the supplier's name and identification for the material.

4.0 PROPERTIES.

4.1 All materials submitted under this specification shall conform to the compositional analysis shown in Table 1.

4.2 Any sealer based on the specified ingredients shall be uniform, stable in storage and free from grit and coarse particles.

4.3 Application Conditions.

4.3.1 The winter grade of coating shall be capable of being applied when the material is at a temperature between 60 F (16 C) and 80 F (27 C). The summer grade of coating shall be capable of being applied when the material is at a temperature between 60 (16 C) and 90 F (32 C).

4.3.2 The winter grade of coating shall be capable of being applied when the surface temperature is between 60 F (16 C) and 100 F (38 C). The summer grade of coating shall be capable of being applied when the surface temperature is between 70 F (21 C) and 130 F (54 C).

4.3.3 The winter grade of coating shall be capable of being applied when the ambient temperature is between 50 F (10 C) and 90 F (32 C). The summer grade of coating shall be capable of being applied when the ambient air temperature is between 70 F (21 C) and 110 F (43 C).

4.3.4 The coating shall be capable of being applied at relative humidities of up to 90 percent.

4.4 The shelf life of the coating shall be a minimum of 24 months when stored at 75 F (24C).

4.5 The coating shall have a theoretical coverage rate of 786 square feet (19.3 square meters) per mixed gallon (liter) at 2 mils (50 µm) dry film thickness.

4.6 The coating shall be applied at 1-2 mils (25-50 µm) dry film thickness over properly cleaned surfaces prepared according to SSPC SP 2, or others as recommended by the coating manufacturer.

4.7 The coating shall be capable of being applied by roller or brush provided manufacturer's recommendations are followed. Spray application is not recommended without contacting the manufacturer for proper procedures.

5.0 LABELING. Each container shall be legibly marked with the following information:

Name: Rust Penetrating Epoxy Sealer

Grade (Winter/Summer):

Specification:

Lot Number:

Date of Manufacturer:

Quantity of Paint in Container:

Information and Warnings as may be required by Federal and State Laws

Manufacturer's Name and Address

6.0 INSPECTION

6.1 All material supplied under this specification shall be subject to timely inspection by the department or authorized representative. The department shall have the right to reject any materials supplied which are found not to comply with the requirements of this specification.

6.2 Samples of any or all ingredients used in the manufacture of this paint may be requested by the department and shall be supplied upon request, along with the supplier's name and identification for the material.

7.0 ACCEPTANCE

7.1 Acceptance of Rust Penetrating Epoxy Sealer will be based on tests performed by the engineer or authorized representative.

TABLE 1

| <u>COMPONENT PROPERTIES</u> | <u>Part A</u> | <u>Part B</u> | <u>Mixed</u> |
|--|---------------|---------------|--------------|
| % Solids, by weight, theoretical, min. | 98 | 95 | 96 |
| % Solids, by volume, theoretical, min. | 100 | 93 | 96 |
| Weight per Gallon. lbs. | 9.6 ± 3% | 8.2 ±3% | 8.9±4% |
| (Mass per liter), Kg. | (1.15 ±3%) | (0.98 ±3% | (1.07 ±4%) |
| Vehicle (generic type) | Epoxy | Amido-amine | --- |
| Volatile Organic Content, lb/gal, (g/L)max | --- | --- | 3.5(420) |

Salt Spray Resistance, 1,500 hours (panel coated with undercutting, Penetrating sealer, midcoat, primer, and 4-mil dry film Thickness of finish coat, over SSP-SP-5 blasted cold rolled Steel – 1-2 mil profile

No more than 1% rust blistering or peeling.